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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/544,268

07/24/2006

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P07285US00

1331

22885 7590 09/10/2008
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EXAMINER

MUROMOTO JR, ROBERT H

ART UNIT

PAPER NUMBER

3765

MAIL DATE

DELIVERY MODE

09/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 25-36, 38, and 40-46 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 4,274,158.

'158 discloses an insulating material for use in diver's suits (wet or dry).

'158 discloses a material with many lamina that are then laminated to each other as claimed.

'158 discloses, "**The layer 26 closest to the wearer's skin is disclosed as being made from knitted nylon (synthetic), cotton, wool or blends or sublayers thereof, (as claimed).**"

'This layer 26 serves primarily **to absorb perspiration from the diver's body in the case of a so-called "dry suit" where wrists, ankles and neck openings seal with the skin of the diver** or in the case of a two-piece "dry suit". It also permits easy donning and doffing of the garment. In the case of a "wet suit" **this layer 26 would function to minimize the extent of convective heat loss to water moving around between the diver's skin and his diving suit** (col. 5, lines 44-54).'

Suit in figures covers areas in claims 28 and 41.

The layer 26 covers the entire suit inherently providing the limitations in claims 30-33 and 41.

Layer 20 is neoprene and is the first outer layer as claimed.

Additional layers are provided outside of the outer layer as claimed.

The layer 26 is clearly separate from outer layer 20 that is then attached together (laminated together). The 'worn as...' limitation does not limit the suit. And the suit is worn as 'a separate layer with the outer layer placed thereover with attachment means provided.' This limitation is also a product-by-process limitation. Once the examiner shows that the reference product is similar to the claimed product the burden shifts to the applicant to show a material difference between the prior art and claimed invention.

As shown in figures once layer 26 attached or laminated to the other layers it does form an 'integral' material as claimed.

'158 discloses that the layer 26 is a knitted two way stretch fabric made from nylon (inherently elastic to some extent) or blends including among other materials wool and nylon. The knitted structure and the use of nylon in the blend would at least partially impart some measure of "elasticity" to the wool blend.

With respect to claim 43, the suit is disclosed as being functional as a wetsuit and inherently provides means for the suit to permit flow of water as claimed. Additionally, the elastic nature of the reference material would inherently provide wrist and ankle seams that would function as recited control means. The specification recites these control means as smooth skin seals at the ankles and wrists.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 37, 39, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over '158.

Although essentially all of the limitations of the claimed invention are disclosed above, '158 does not teach the use of merino wool or the specific percentage for blending of the synthetic and wool material.

With respect to the percentage blend, absent any criticality or showing of unexpected results arising from the specific blend range, one of ordinary skill in the art could through routine engineering design choice determine the exact blend percentage for a desired end use application of the dive suit material.

As for the use of merino wool, it is a well-known and widely used practice to use merino wool instead of standard wool. Merino wool is recognized as a higher grade of wool, having increased softness and comfort against the skin (see Non Patent Literature cited on PTO-892) and has been in use for hundreds of years in all type of garments that require warmth and comfort.

Therefore it would have been an obvious variant to modify the '158 wool or wool blended layer to use merino wool as merino wool is recognized as a higher grade of wool, having increased softness and comfort against the skin (see Non Patent Literature cited on PTO-892) and has been in use for hundreds of years in all type of garments that require warmth and comfort.

Response to Arguments

Applicant's arguments filed 6/10/2008 have been fully considered but they are not persuasive.

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Applicant's arguments with regard to the 102b rejection are incorrect.

Firstly, 'teaching away' arguments are irrelevant to 102b Rejections as per the MPEP.

Secondly, the reference clearly discloses as cited in rejection above, in a citation directly from the reference, that layer 26 is the inner most layer next to the wearer's skin, and that the layer be made from various materials including wool. And that depending on the desired type of suit, wet or dry, the layer would absorb perspiration for drysuits; or 'minimize' the convective heat loss from 'water that is between the suit and the wearer' (i.e., in the suit). Wool inherently retains "at least some" water as claimed.

Discussion about impermeable core layers are not relevant as the current claim limitations do not exclude additional layers as the claim is in 'comprising' or open format. All recited claim limitations are clearly disclosed by the prior art as shown here and in the previous rejections as cited above.

Arguments with respect to the 103 rejection are incorrect.

As shown in the previous rejections and presently above, the base reference does not 'teach away' from water/liquid entering the suit as the term "wetsuit" is defined as a suit that traps some water in the suit and uses it to help insulate the wearer and even further the reference clearly discloses an inner layer containing wool (inherently hydrophilic) that would trap water in the suit, as claimed.

Additionally, with respect to the exact percentage of wool used and the type of wool used:

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“The selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945) (Claims to a printing ink comprising a solvent having the vapor pressure characteristics of butyl carbitol so that the ink would not dry at room temperature but would dry quickly upon heating were held invalid over a reference teaching a printing ink made with a different solvent that was nonvolatile at room temperature but highly volatile when heated in view of an article which taught the desired boiling point and vapor pressure characteristics of a solvent for printing inks and a catalog teaching the boiling point and vapor pressure characteristics of butyl carbitol. “Reading a list and selecting a known compound to meet known requirements is no more ingenious than selecting the last piece to put in the last opening in a jig-saw puzzle.” 325 U.S. at 335, 65 USPQ at 301.).

Changes in Size/Proportion

In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955) (Claims directed to a lumber package "of appreciable size and weight requiring handling by a lift truck" where held unpatentable over prior art lumber packages which could be lifted by hand because limitations relating to the size of the package were not sufficient to patentably distinguish over the prior art.); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976) ("mere scaling up of a prior art process capable of being scaled up, if such were the case, would not establish patentability in a claim to an old process so scaled." 531 F.2d at 1053, 189 USPQ at 148.).

In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

Therefore the mere selection of Merino wool, a well-known “premium wool” in any percentage used to take advantage of wools intrinsic, well-known, hydrophilic and insulative properties can not be considered as patentably distinct limitations therefore supporting the prima facie obviousness previously and instantly presented by the Examiner.

Since these are the arguments and no substantive amendments are provided the rejections remain and are considered to be proper.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BOBBY H. MUROMOTO JR whose telephone number is (571)272-4991. The examiner can normally be reached on 8-530, M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert H Muromoto, Jr./
Primary Examiner, Art Unit 3765